BOOK REVIEW

Ham, R. van der, W. de Wit, G. Zuidema & M. van Birgelen, 1987. Zeeëgels uit het Krijt en Tertiair van Maastricht, Luik en Aken. Een atlas van de zeeëgels uit het Campaniën, Maastrichtiën en Daniën van Zuid-Limburg en aangrenzende delen van België en Duitsland. Publicaties van het Natuurhistorisch Genootschap in Limburg, 36, 92 pp., 3 tab., 17 figs, 24 pls.

This paper can be ordered by payment of HFl. 14.50 (members of the Natuurhistorisch Genootschap Limburg), or HFl. 19.50 (non-members) by (international) money order or by transfer on post check account 429851 of 'Publicatiebureau Natuurhistorisch Genootschap, Groenstraat 106, 6074 EL Melick, The Netherlands. These prices include postage. The paper can also be bought in the Natural History Museum at Maastricht (prices, without postage, resp. HFl. 10.— and HFl. 15.—).

The subject of the book under review is the rich and diverse echinoid fauna from the Late Cretaceous and Early Palaeocene (Campanian, Maastrichtian and Danian) of the Maastricht area in the South of the province of Limburg (The Netherlands) and of contiguous areas in West Germany and Belgium.

In the relatively small circle of Dutch-speaking echinoid enthusiasts it had been long known that this atlas was going to be published. To them this review is superfluous: they have bought the book right away. Even echinoid specialists may find things in it that are new to them, not only in the extensive list with literature references, which, to my knowledge, is really complete up to the publication date of the book itself.

The term 'atlas' as chosen by the authors, might cause the misconception that this book contains nothing but plates. This is not the case. Although the illustrations, in the form of excellent drawings, cover a full 24 pages, the first half of the book comprises supporting text.

Following a short introduction, the topography and stratigraphy of the area are briefly discussed. The importance of flint and flint eluvium in relation to a certain number of the echinoids discussed is also indicated. The introductory part is concluded by a condensed history of the study of fossil echinoids from the area.

Succeeding this, all species from the area presently known to the authors are discussed in systematic order. The authors have not confined themselves to an examination of museum collections, and rightly so, since they had found their own collections and those of quite a few other amateur collectors to be partly unique. Thus, it can be explained why the number of known species has nearly doubled now to approximately 100 since the last count in 1965.

The systematic part of the book starts with an explanation of the nomenclature and of the most important terms used in the systematic descriptions. This approach is undoubtedly very useful for non-insiders. At the same time, it offers the authors a chance to keep the descriptions of the species pleasantly short. As a consequence, however, this means that these descriptions are not directly suited for identification purposes. The innocent reader, who would want to use them for a 'quick' identification without familiarizing himself with the jargon before, will soon find himself at a loss.

The closing chapter summarizes the stratigraphical distribution of all species, distinguishing four broad categories, each of them characterized by particular echinoid assemblages. These are termed biostratigraphic zones by the authors, which, in fact, they are not. The text part of the book concludes with an extensive list of literature references, as already mentioned.

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A glance through the second part of the book explains why the authors chose the term 'atlas' in the subtitle. The execution of the minute drawings of nearly all species described in the systematic part, is proof of an admirable dedication and tenacity. The apical view, one lateral view and the oral view of each species is pictured at actual sizes. However, in practice a correct identification of small species in particular is often only possible with the use of a moderately magnifying binocular microscope. In my view, therefore, a reproduction of the drawings of the smaller species on more than their actual sizes would have been justified. Apart from this critical note, for the real aficionado a look at these drawings cannot be but rejoicing.

Since, essentially, this book is largely a compilation of the existing literature, the authors do not pretend to have spoken the last word in every respect. This is especially apparent in the systematic part in which a number of unidentifiable fragments are described as separate taxa. The authors explicitly call for further study.

Without reserve I can recommend this atlas to all those people who have echinoids from the area in their collections and to whom the geological time scale probably starts long before the Cretaceous-Tertiary boundary. On condition that one familiarizes oneself with the terminology used, it will turn out to be a practical help towards a proper identification.

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